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**To:** [Robert W. Gensemer](#); [Burt Shephard/R10/USEPA/US@EPA](#)  
**Cc:** [Bob Dexter](#); [Eric Blischke/R10/USEPA/US@EPA](#); [Carrie A. Smith](#); [cunninghame@gorge.net](#); [dallen@stratusconsulting.com](#); [Davidw Charters/ERT/R2/USEPA/US@EPA](#); [David DeForest](#); [Eric Blischke/R10/USEPA/US@EPA](#); [erin.madden@gmail.com](#); [howp@critfc.org](#); [James.Meador@noaa.gov](#); [jeremy\\_buck@fws.gov](#); [John Malek](#); [Joe Goulet/R10/USEPA/US@EPA](#); [jpeers@stratusconsulting.com](#); [Kelly Madalinski/DC/USEPA/US@EPA](#); [Lisa.Bluelake@grandronde.org](#); [Marc Greenberg/ERT/R2/USEPA/US@EPA](#); [Michael.Karnosh@grandronde.org](#); [Nancy.Beckvar@noaa.gov](#); [Robert Neely](#); [rose@yakama.com](#); [sheila@ridolfi.com](#)  
**Subject:** RE: Portland Harbor tissue TRV approach call on Monday, May 19th, 11am to 1pm  
**Date:** 05/19/2008 11:34 AM

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What about the dioxin like PCBs added to the dioxins and furans? Also, are those the fish TEFs?

-----Original Message-----

From: Robert W. Gensemer [mailto:rgensemer@parametrix.com]  
Sent: Monday, May 19, 2008 11:30 AM  
To: Shephard.Burt@epamail.epa.gov  
Cc: Bob Dexter; Blischke.Eric@epamail.epa.gov; Carrie A. Smith; cunninghame@gorge.net; dallen@stratusconsulting.com; Charters.DavidW@epamail.epa.gov; David DeForest; Blischke.Eric@epamail.epa.gov; erin.madden@gmail.com; howp@critfc.org; James.Meador@noaa.gov; jeremy\_buck@fws.gov; John Malek; Goulet.Joe@epamail.epa.gov; jpeers@stratusconsulting.com; Madalinski.Kelly@epamail.epa.gov; Lisa.Bluelake@grandronde.org; Greenberg.Marc@epamail.epa.gov; Michael.Karnosh@grandronde.org; Nancy.Beckvar@noaa.gov; PETERSON Jenn L; Robert Neely; rose@yakama.com; sheila@ridolfi.com  
Subject: RE: Portland Harbor tissue TRV approach call on Monday, May 19th, 11am to 1pm

Burt and others: We just did a quick screen in Query Manager with dioxin TEQs rather than 2,3,7,8-TCDD vs. the 90 pg/g tissue TRV used in the screen. Tissue #s selected used the "fish" TEF-based summation from QM. At least for round 1-2 data, all fish tissue samples still screen out. Only a single organism tissue sample in the harbor exceeded the 90 pg/g screening-level TRV, and this was a lumbriculus sample of some kind, and so the fish-based TEFs may not be appropriate for that sample.

Of course, round 3 data may show us something different, and if the TEFs are not appropriate for some reason, this would need to be revisited. But round 1-2 data as they stand in QM would still screen out all dioxins for the fish tissue line of evidence.

-Bob

-----Original Message-----

From: Shephard.Burt@epamail.epa.gov  
[mailto:Shephard.Burt@epamail.epa.gov]  
Sent: Monday, May 19, 2008 10:42 AM  
To: Shephard.Burt@epamail.epa.gov  
Cc: Bob Dexter; Blischke.Eric@epamail.epa.gov; Carrie A. Smith; cunninghame@gorge.net; dallen@stratusconsulting.com; Charters.DavidW@epamail.epa.gov; David DeForest; Blischke.Eric@epamail.epa.gov; erin.madden@gmail.com; howp@critfc.org; James.Meador@noaa.gov; jeremy\_buck@fws.gov; John Malek; Goulet.Joe@epamail.epa.gov; jpeers@stratusconsulting.com; Madalinski.Kelly@epamail.epa.gov; Lisa.Bluelake@grandronde.org; Greenberg.Marc@epamail.epa.gov; Michael.Karnosh@grandronde.org; Nancy.Beckvar@noaa.gov; Jennifer L Peterson; Robert W. Gensemer; Robert Neely; rose@yakama.com; sheila@ridolfi.com  
Subject: Re: Portland Harbor tissue TRV approach call on Monday, May 19th, 11am to 1pm

Going through everyone's comments (and thanks to everyone for their comments) on the draft tissue TRV derivation, those of you not regulars on Portland Harbor should be aware of a couple of agreements already reached between EPA and the Lower Willamette Group in the bigger picture of the baseline ecological risk assessment that affect the tissue TRV derivations. Specifically, the assessment endpoints, which consist of entities to be protected and attributes of the entities to be protected have already been agreed on. These agreements provide some limits regarding both the taxonomic groupings of species for which TRVs need to be derived, as well as the toxicological endpoints to be considered for incorporation in the TRVs, and are described in the following paragraph, which has been incorporated into the draft TRV derivation text you've all seen.

The BERA assessment endpoints generally take the form of "Survival, reproduction, or growth of [ecological receptor]", and are the explicit expressions of environmental values EPA is trying to protect. Assessment endpoints consist of an entity and one or more attributes of that entity. For the Portland Harbor BERA, entities are a group of species related in some way, and are groups of aquatic species with either a common feeding guild (e.g. piscivorous fish) or a common habitat in which they reside (e.g. benthic macroinvertebrates). Ecological receptors as defined in the BERA assessment endpoints are groups of species related in some manner, not individual species. An attribute is a characteristic of the entity EPA desires to protect. As per EPA (1997) ecological risk assessment guidance, the attributes being protected at Portland Harbor are survival, reproduction and growth (although see discussion of certain fish behaviors later in this

section). The BERA assessment endpoints therefore define both the entities which EPA is attempting to protect and the attributes of the entities which are to be protected. These definitions in turn define the species from which literature residue-effects information is compiled, as well as the toxicological endpoints to be assessed.

One of the biggest changes to the draft text is addition of another tier to the hierarchy of derivation methods, to incorporate calculation of TRVs using what was termed the uncertainty factor approach in the initial draft. This addition is intended to allow derivation of TRVs for chemicals with 1-4 available studies, but which don't have enough data to permit a SSD derivation of a TRV. We'll have to discuss the details of how to do this on the call.

Best regards,

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"If your experiment needs statistics to analyze the results, then you ought to have done a better experiment"  
- Ernest Rutherford